CLAIMS

What is claimed is:

- 1 1.\A method, comprising accommodating within a common communication channel having
- 2 designated transmission time slots for various devices of a computer network transmissions
- 3 within the channel outside of a device's designated time slot through the use of a clear
- 4 channel assessment time.
- 1 2. The method of claim 1 wherein the clear channel assessment time takes into account the
- 2 device's designated transmission time slot within the communication channel with respect
- 3 to those of other network devices.
- 1 3. The method of claim 2 wherein the clear channel assessment time comprises a time
- 2 period that is the product of a predetermined clear channel waiting time and a numerical
- 3 representation of the difference between the device's designated transmission time slot
- 4 within the communication channel and that of another network device that completed a
- 5 preceding transmission.
- 1 4. The method of claim 3 wherein the clear channel waiting time is specified by a network
- 2 master device as part of a network connection process.
- 1 5. The method of claim 1 wherein the transmissions within the channel outside of a
- 2 device's designated time slot are accommodated after all regularly scheduled transmissions
- 3 within the channel during a network frame period have been completed.

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6. A method, comprising main taining a clear channel assessment that takes into account a

2 first device's designated transmission time slot within a communication channel with

respect to those of other network devices in order to determine idle times that exist after

completion of regularly scheduled transmissions within the communication channel.

1 7. The method of claim 6 wherein the first device transmits within the common

2 communication changel upon an indication that the channel is available for transmission.

8. The method of claim 7 wherein the indication is made upon the expiration of a time period that is the product of a predetermined clear channel waiting time and a numerical representation of the difference between the first device's designated transmission time slot

within the communication channel with respect to that of another network device.

1 9. The method of claim 8 wherein the predetermined clear channel waiting time is

2 designated by a network master device upon a connection thereto by the first device.

1 10. A network client comprising a clear channel assessment indicator and configured to

2 transmit within a communication channel of a computer network at a time determined in

3 part by a notification from the clear channel assessment indicator and in part by

4 transmission characteristics of other devices transmitting within the channel.

1 11. The network client of claim 10 wherein the transmission characteristics comprise a

2 numerical difference between a designated transmission slot for the network client and that

3 of at least one of the other devices.

1 12. The network client of claim 10 wherein the channel is a time division multiplexed

2 wireless communication channel.

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- 13. A method comprising negotiating a transmission time in a time division multiplexed communication channel independent of a need to transmit asynchronous data within idle times of a transmission frame period.
- 14. The method of claim 13 wherein transmissions of asynchronous data within the idle times are scheduled by devices utilizing the communication channel according to a clear channel assessment time and transmission characteristics of other devices transmitting within the channel.
- 15. The method of claim 14 wherein the transmission characteristics comprise designated transmission time slots within the transmission frame period.
- 16. A method comprising accommodating asynchronous data transmissions within a synchronized network in which inter-node communications are organized into frames of time periods by permitting such asynchronous communications within otherwise idle times within the frames.
- 17. The method of claim 16 wherein use of the otherwise idle times within the frames takes into account a transmitting node's designated transmission time within a particular frame with respect to transmission times of other nodes of the network.
- 18. The method of claim 16 wherein the asynchronous data transmissions are self-organized and/or self-synchronized by nodes of the network without direct scheduling assistance from a network master.